AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1.-16. (Canceled)

17. (Currently Amended) A method for generating a cytotoxic T-cell eliciting immune response to prostate-specific antigen (PSA) in a human host, comprising[[,]] administering to the host a first pox virus vector to stimulate an immune response, wherein the first pox virus vector has at least one insertion site containing a DNA segment encoding PSA or a cytotoxic T-cell eliciting epitope thereof operably linked to a promoter such that the DNA segment is expressed to produce PSA or the cytotoxic T-cell eliciting epitope thereof in the host in a sufficient amount to generate a cytotoxic T-cell eliciting immune response ~~and an effective amount of a cytokine~~, and then administering the first pox virus vector, administering an additional PSA or T-cell eliciting epitope thereof in a manner selected from the group consisting of in a second pox virus vector, in a formulation with an adjuvant, with a cytokine, with a co-stimulatory molecule, in a liposomal formulation, and a combination thereof.

18.-19. (Canceled)

20. (Previously Presented) The method of claim 17, wherein the pox virus vector is selected from the group of pox viruses consisting of suipox, avipox, and capripox virus.

21. (Canceled)

22. (Previously Presented) The method of claim 20, wherein the avipox is fowlpox, canary pox or pigeon pox.

23.-24. (Canceled)

25. (Currently Amended) The method of claim ~~24 or 35~~ 17, wherein the adjuvant is selected from the group consisting of RIBI Detox, QS21 and incomplete Freund's adjuvant.

26. (Previously Presented) The method of claim 17, wherein the cytokine is selected from the group consisting of IL-2, IL-6, or IL-12.

27. (Currently Amended) The method of claim ~~18 or 35~~ 17, wherein the costimulatory molecule is selected from the group consisting of B7.1 or B7.2.

28. (Currently Amended) The method of claim ~~18 or 35~~ 17, further comprising administering to the host additional cytokine or co-stimulatory molecule.

29. (Currently Amended) The method of ~~claim 19~~ any one of claims 17 or 28, wherein the ~~pox virus vector further contains a DNA encoding a~~ cytokine or co-stimulatory molecule is administered in a manner selected from the group consisting essentially the first pox virus, the second pox virus, systemically, and combinations thereof.

30. (Currently Amended) The method of claim ~~19, wherein the host is initially administered the PSA or cytotoxic T-cell eliciting epitope thereof by introducing a pox virus vector to the host having at least one insertion site containing a DNA segment encoding PSA or a cytotoxic T-cell eliciting epitope thereof operably linked to a promoter capable of expression in the host~~ 17, wherein the method comprises administering additional PSA or a cytotoxic T-cell eliciting epitope thereof in a second pox virus, and the second pox virus vector is from a genus other than the first pox virus vector ~~administered thereafter~~.

31. (Currently Amended) The method of claim 30, wherein the first pox virus ~~initially administered~~ is selected from the group of pox viruses consisting of suipox, avipox, capripox, and orthopox.

32.-33. (Canceled)

34. (Currently Amended) The method of claim 30 ~~33~~, wherein the first pox virus vector ~~initially administered~~ is vaccinia and the second pox virus vector is ~~boosting amount of PSA is administered by introducing an~~ avipox.

35. (Canceled)

36. (Previously Presented) The method of claim 34, wherein the avipox is fowlpox.

37. (New) The method of claim 17, the second administration is about 1 month to about 3 months after the first administration.

38. (New) The method of claim 37, wherein the second administration is about one month after the first administration.

39. (New) The method of claim 37, wherein the second administration is about 2 months after the first administration.

40. (New) The method of claim 37, wherein the second administration is about 3 months after the first administration.

41. (New) The method of claim 17, wherein the first pox virus vector is administered via a route selected from the group consisting of intradermal, subcutaneous, intramuscular, intravenous, and intraperitoneal administration.

42. (New) The method of claim 17, wherein the second pox virus vector is administered via a route selected from the group consisting of intradermal, subcutaneous, intramuscular, intravenous, and intraperitoneal administration.